

WHAT IS CLAIMED IS:

1. A manufacturing method of a domain wall displacement type magneto-optical recording medium comprising the steps of:

5 depositing a magnetic layer on a substrate to prepare a disc; and

irradiating the magnetic layer with a converged light beam while applying a magnetic field and annealing the magnetic layer a converged light beam
10 between information tracks.

2. The manufacturing method according to claim 1, wherein said magnetic field is parallel to the direction of a scanning with said light beam in
15 the surface of said disc.

3. The manufacturing method according to claim 2, wherein said magnetic fields have the same magnitude and different polarity between those
20 applied to their respective information tracks adjacent to each other.

4. The manufacturing method according to claim 2, wherein said magnetic fields have the same
25 magnitude and same polarity between their respective information tracks adjacent to each other.

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5. The manufacturing method according to claim 1, wherein said magnetic fields are perpendicular to the disc surface and have the same magnitude and different polarity between those applied to their respective information tracks adjacent to each other.

6. The manufacturing method according to claim 1, wherein said magnetic fields are perpendicular to the direction of a scanning with said light beam in the surface of the disc, and have the same magnitude and same polarity between those applied to their respective information tracks adjacent to each other.

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7. The manufacturing method according to claim 1, wherein an intensity of said magnetic field is not less than 50 Oe.

8. The manufacturing method according to claim 1, wherein said magnetic fields have its polarity switched every one cycle of the disc.

9. The manufacturing method according to claim 1, wherein said magnetic fields have its polarity switched several times in one cycle of the disc.

10. The manufacturing method according to claim 9, wherein the area where the polarity is switched is an area other than a user data area.

5 11. A domain wall displacement type magneto-optical disc comprising:

a domain wall displacement layer in which a domain wall displaces;

10 a memory layer that holds a recording magnetic domain according to information;

a switching layer that is provided between the domain wall displacement layer and the memory layer and has a Curie temperature lower than that of those layers; and

15 a disconnecting area that is provided in the domain wall displacement layer and disconnects a switching connection between information tracks;

20 wherein the polarity of a residual magnetization at a boundary between the information track and the disconnection area is oriented in a certain direction.

12. The domain wall displacement type magneto-optical disc according to claim 11, wherein the direction of said residual magnetization is switched
25 in polarity at a predetermined cycle.

13. The domain wall displacement type magneto-

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optical disc according to claim 12, wherein said switching occurs one cycle of the disc as an unit.

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